



Grade 5 ~ Science ~ Unit 4

Weather Webquest

Project Due: May 6, 2011

Objectives 3.01, 3.02, 3.03, 3.04, 3.05, 3.06

Name _____

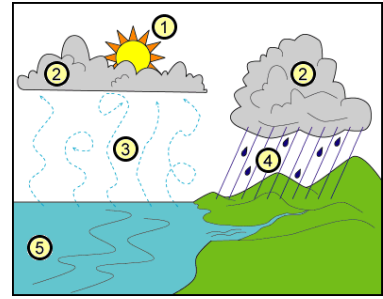
- I. Objective: Students will complete a comprehensive webquest in order to build an understanding of weather and climate.
- II. Task: Students will use Internet sources related to weather and climate to do the following:
 - A. Gather information about the water cycle, clouds, weather, and climate.
 - B. Record the information
 - C. Complete an online assessment.
- III. Process: Using the given web addresses and included forms, find and record information about the following weather concepts:
 - A. The Water Cycle
 - B. Cloud Types and Formation
 - C. Local Weather
 - D. Weather Across the US
 - E. Climate
- IV. Assessment:

Go to:

<http://www2.davidson.k12.nc.us/webquests/weather/weatherquiz.html>

to complete an on-line quiz based on what you have studied. When you finish the quiz and your score appears on the screen, record your score here: _____
- V. This Webquest is also available at:

www.sanfordcreek5th.wikispaces.com



The Water Cycle

Go to: <http://www.mbgnet.net/fresh/cycle/index.htm>.

Answer the following questions.

1. Define "water cycle".

2. What fraction of the earth's surface is covered in water? _____

3. What percentage of all the Earth's water is in a form that is useable to humans and land animals? _____

Go to: <http://www.mbgnet.net/fresh/cycle/concepts.htm>.

Answer the following questions.

1. Evaporation is the process where a liquid changes from its _____ state to a _____ state.

2. Why is evaporated water so clean?

3. Condensation occurs when a _____ is changed into a _____.

4. Condensation is the opposite of _____.

5. When the _____ and _____ are right, the small droplets of water in clouds form larger droplets and precipitation occurs.

Go to: <http://www.mbgnet.net/fresh/cycle/cycle.htm>. Answer the following questions.

1. Using the terms "evaporation", "condensation", and "precipitation", explain the water cycle in your own words. Use a separate sheet of paper.

2. What factor is most important in determining whether water is a solid, liquid, or gas? _____

3. Is the amount of water on Earth always changing or is it a constant amount?



Cloud Types and Formation

Go to: <http://www.srh.noaa.gov/crp/?n=educationclouds>

Answer the following questions.

1. What does the word "Cirrus" mean? _____
2. Are cirrus clouds low or high? _____
3. What are the large clouds that sometimes look like huge puffs of cotton? _____
4. What root word tells us that a cloud brings rain? _____
5. Which type of cloud usually covers the whole sky and brings gray days?

Go to: <http://www.fi.edu/weather/events/fog.html>. Answer the following questions.

1. Fog is a _____ based on the ground, rather than in the atmosphere.
2. Fog forms when there is a lot of _____ near the ground, or when the air near the ground cools to the dew point.

Go to:

<http://ww2010.atmos.uiuc.edu/%28Gh%29/guides/mtr/cld/dvlp/cnvct.rxml>.

Complete the missing information.

1. As the earth is heated by the sun, bubbles of _____ rise upward from the warm surface.
2. If a thermal (vapor) is able to rise high enough to cool to its _____ point, the moisture condenses and becomes visible as a _____.



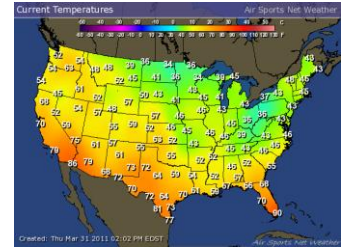
Local Weather

1. Go to: <http://www.weather.com/weather/today/Rolesville+NC+USNC0585> and record the current conditions in the first column of your worksheet. Return to: <http://www.weather.com/weather/today/Rolesville+NC+USNC0585> daily for four more days to complete the worksheet.

Week of _____ to _____

Date					
Time					
Barometric Pressure					
Temperature					
Relative Humidity					
Wind Direction					
Wind Speed					
Precipitation					
General Weather Conditions					

Weather Across the USA



Use the following links to record current weather conditions in each of the cities.

Rolesville, NC

<http://www.weather.com/weather/today/Rolesville+NC+USNC0585>

St. Louis, MO

<http://www.weather.com/outlook/recreation/local/USMO0787>

Los Angeles, CA

<http://www.weather.com/outlook/recreation/local/USCA0638>

Juneau, AK

<http://www.weather.com/outlook/recreation/local/USAK0116>

Honolulu, HI

<http://www.weather.com/outlook/recreation/local/USHI0026>

City Name	Lexington, NC	St. Louis, MO	Los Angeles, CA	Juneau, AK	Honolulu, HI
Time					
Barometric Pressure					
Temperature					
Relative Humidity					
Wind Direction					
Wind Speed					
Precipitation					
General Weather Conditions					



Climate

1. Go to: <http://www.infoplease.com/ce6/weather/CE011513.html> to complete this question.

Climate is the average condition of the atmosphere near the earth's surface over a long period of time, taking into account _____, _____, humidity, wind, _____ pressure, and other phenomena.

2. Go to: <http://www.infoplease.com/ce6/weather/A0857393.html> to complete this question

The major influence governing the climate of a region is its _____.

3. Go to: <http://www.infoplease.com/ipa/A0762183.html> to complete the table below.

	Mt. Washington New Hampshire	Miami Florida	Raleigh North Carolina
January Average Temp			
April Average Temp			
July Average Temp			
October Average Temp			
Average Rainfall in inches			
Average Days with Rainfall			
Average Snowfall			

